IN THE CLAIMS

- 1. (Currently Amended) An isolated lantibiotic comprising SEQ ID NO:6 or a biologically functional variant thereof.
- 2. (Currently Amended) An isolated lantibiotic comprising the following structure:

SEQ ID NO:6.

- 3. (Withdrawn) An isolated pre-lantibiotic comprising SEQ ID NO:12 or a biologically functional variant thereof.
- 4. (Currently Amended) The isolated lantibiotic of claim 1, wherein the biologically functional variant lantibiotic comprises at least one or two conservative amino acid substitution substitutions.
- 5. (Currently Amended) The isolated lantibiotic of claim [[4]] 1, wherein the a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 6, 13, 19 or combinations thereof.
- 6. (Currently Amended) The isolated lantibiotic of claim [[4]] 1, wherein a conservative amino acid substitution occurs at amino acid number 13, and comprises a Lys in place of an Arg (SEQ ID NO:7).
- 7. (Currently Amended) The isolated lantibiotic of claim [[4]] 1, wherein a conservative amino acid substitution occurs at amino acid number 19 and comprises a Dha in place of an Ala (SEQ ID NO:8).

- 8. (Currently Amended) The isolated lantibiotic of claim [[4]], 1 wherein a conservative substitution occurs at amino acid number 6 and comprises a Phe in place of a Leu (SEQ ID NO:9).
- 9. (Canceled)
- 10. (Currently Amended) The isolated lantibiotic of claim 1, wherein the biologically functional variant lantibiotic comprises:
 - (a) an amino acid substitution at amino acid number 6, which comprises a Phe in place of a Leu; and
 - (b) an amino acid substitution at amino acid number 13, which comprises a Lys in place of an Arg;

which is shown in SEQ ID NO:11.

- 11. (Original) A detrifrice comprising the isolated lantibiotic of claim 1 and a carrier or excipient.
- 12. (Original) A bacteriocidal or bacteriostatic composition comprising an effective amount of the lantibiotic of claim 1 and a carrier or excipient.
- 13. (Canceled)
- 14. (Original) A bacteriocidal or bacteriostatic composition comprising an effective amount of the lantibiotic of claim 10 and a carrier or excipient.
- 15. (Original) A pharmaceutical composition comprising the lantibiotic of claim 1 and a pharmaceutically acceptable carrier or excipient.
- 16. (Canceled)
- 17. (Original) A pharmaceutical composition comprising the lantibiotic of claim 10 and a pharmaceutically acceptable carrier or excipient.
- 18. (Original) The pharmaceutical composition of claim 15, wherein the lantibiotic is active against a Gram positive bacteria.
- 19. (Original) The pharmaceutical composition of claim 18, wherein the Gram positive bacteria is selected from the group consisting of Actinomyces, Bacillus, Clostridium, Corynebacterium, Enterococcus, Listeria, Lactobacillus, Mycobacterium, Propionobacteria, Staphylococci, and Streptococci.
- 20. (Original) The pharmaceutical composition of claim 18, wherein the Gram positive bacteria is selected from the group consisting of *Corynebacterium*

- diphtheriae, Propionobacterium acnes, Listeria monocytegenes, Bacillus anthracis, and Mycobacterium phlei.
- 21. (Original) The pharmaceutical composition of claim 18, wherein the lantibiotic is active against a Gram negative bacteria.
- 22. (Original) The pharmaceutical composition of claim 18, wherein the Gram negative bacteria is selected from the group consisting of *Flavobacterium*, *Actinobacillus*, *Enterobacter*, and *Neisseria*.
- 23. (Original) A pharmaceutical composition comprising a bacteriostatic or bacteriocidal amount of the lantibiotic of claim 1 and a carrier or excipient.
- 24. (Canceled)
- 25. (Original) A pharmaceutical composition comprising a bacteriostatic or bacteriocidal amount of the lantibiotic of claim 10 and a carrier or excipient.
- 26. (Withdrawn) A method of controlling the growth of bacteria in an animal comprising administering to the animal a composition comprising the lantibiotic of claim 1, whereby growth is controlled.
- 27. (Withdrawn) The method of claim 26, wherein the animal is a human.
- 28. (Withdrawn) A method of treating or ameliorating a bacterial infection in an animal comprising administering to the animal a composition comprising the lantibiotic of claim 1, whereby the infection is treated or ameliorated.
- 29. (Withdrawn) The method of claim 28, wherein the animal is a human.
- 30. (Withdrawn) A method for controlling bacterial growth in or on an object comprising applying the lantibiotic of claim 1 to the object, whereby bacterial growth is controlled.
- 31. (Withdrawn) The method of claim 30, wherein the object is food.
- 32. (New) The isolated lantibiotic of claim 1, wherein a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 13, 19 or combinations thereof.
- 33. (New) The isolated lantibiotic of claim 1, wherein a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 6, 19 or combinations thereof.

- 34. (New) The isolated lantibiotic of claim 1, wherein a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 13, or combinations thereof.
- 35. (New) The isolated lantibiotic of claim 1, wherein a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 6, or combinations thereof.
- 36. (New) The isolated lantibiotic of claim 1, wherein a conservative amino acid substitution occurs at amino acid position 1, 2, 4, 5, 19, or combinations thereof.